IN THE CLAIMS:

Claim 1 (currently amended) An actuated prosthesis for replacement of an amputated limb, the prosthesis comprising:

a primary joint member;

a socket connector assembly for connecting a socket to said primary joint member;

an elongated structural member having opposite ends spaced apart along[,] a main longitudinal axis;

a connector assembly for connecting a terminal portion to on end of said structural member;

a pivot assembly for operatively connecting the structural member to the primary joint member to permit relative rotation between said primary joint member and said structural member about an first axis defined by said pivot assembly; and

a linear actuator comprising a motor and drive member, said motor being connected ~~at one end~~ to said structural member and said drive member being pivotally connected ~~at the opposite end~~ to said primary joint member at a location spaced from said pivot assembly,

whereby extension or retraction of said actuator induces a corresponding rotation of said primary joint member relative to said structural member about said pivotal axis.

Claim 2 (original) The prosthesis according to claim 1, wherein: said actuator is connected to said primary joint member and said structural member by respective pivotal connections having pivot axes substantially parallel to and spaced from said first axis.

Claim 3 (original) The prosthesis according to claim 1, wherein said actuator is located within said structural member.

Claim 4 (previously withdrawn)

Claim 5 (original) The prosthesis according to claim 3 wherein said structural member includes a hollow shell and said actuator is located within said shell.

Claim 6 (original) The prosthesis according to claim 5 wherein said shell is formed from an open channel member and a detachable closure.

Claim 7 (original) The prosthesis according to claim 5 wherein an energy storage module is supported on said shell.

Claim 8 (currently amended) The prosthesis according to claim 5 wherein a circuit ~~boards~~ board is supported on said shell.

Claim 9 (original) The prosthesis according to claim 1, wherein said prosthesis is a leg for use by an above knee amputee and further comprising an artificial foot attached to a distal end of the structural member, the artificial foot defining a front side and a rear side of the prosthesis.

Claim 10 (original) The prosthesis according to claim 9, wherein one end of the actuator is connected to said primary joint member forwardly of said first pivot axis.

Claim 11 (original) The prosthesis according to claim 3, wherein the structural member includes a back plate extending between opposite ends of said structural member.

Claims 12 to 13 (previously withdrawn)

Claim 14 (original) The prosthesis according to claim 9, further comprising a socket attached to said primary joint member.

Claim 15 (original) The prosthesis according to claim 1, further comprising a controller for controlling the actuator.

Claim 16 (original) The prosthesis according to claim 15, wherein said controller outputs control signals to said actuator in response to input signals from proprioceptors.

Claim 17 (previously amended) The prosthesis according to claim 16, wherein the controller has an output connected to a power drive, the power drive supplying electrical energy to the actuator, from a power source, in response to the control signals.

Claim 18 (previously amended) The prosthesis according to claim 16, wherein the input signals further comprise signals from sensors mounted on said actuator.

Claim 19 (currently amended) The prosthesis according to claim 1 wherein said ~~actuator includes~~ motor is a rotary motor and ~~a~~ said drive member is operated by said rotary motor to translate rotary motion of said rotary motor to a linear displacement.

Claim 20 (currently amended) The prosthesis according to claim 19 wherein said drive member is a screw rotatable by said rotary motor and a follower ~~displacable~~ displaceable along said screw upon rotation thereof by said rotary motor.

Claim 21 (currently canceled)

Claim 22 (previously withdrawn)

Claim 23 (previously amended) The prosthesis according to claim 1 wherein a load sensor is interposed between said actuator and one of said members to provide an indication of loads imposed on said prosthesis.

Claim 24 (original) The prosthesis according to claim 1 including a sensor to provide an indication of relative motion between said primary joint and said structural member.

Claim 25 (currently amended) The prosthesis of claim 24 wherein said ~~sensors are~~ sensor is an optical ~~sensors~~ sensor.

Claims 26 to 34 (previously withdrawn).